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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



December 24, 2021
Sent via email

Governor's Office of Planning & Research

Dec 24 2021

Ms. Cathreen Richards
Planning Director
County of Inyo
168 N. Edwards St. PO Box
Independence, CA 93526

STATE CLEARINGHOUSE

Subject: Initial Study and Mitigated Negative Declaration
Conditional Use Permit (CUP) 2021-03 Glacier Fed Farms
State Clearing House No. 2021120279

Dear Ms. Richards:

The California Department of Fish and Wildlife (CDFW) received an Initial Study/Mitigated Negative Declaration (IS/MND) from County of Inyo (County) for the Conditional Use Permit 2021-03 Glacier Fed Farms Project (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources, and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guideline-s" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

ASSEMBLY BILL (AB) 819

Assembly Bill (AB) 819 was signed into law by the Governor this year and becomes effective January 1, 2022. AB 819 will require lead agencies to submit certain environmental documents and notices electronically to the State Clearinghouse (SCH) at Office of Planning and Research (OPR). Thus, effective January 1, 2022, lead agencies must take the following actions to comply with CEQA:

- File on CEQAnet – Draft environmental impact reports (DEIR), proposed negative declarations (ND), proposed mitigated negative declarations (MND) must be filed electronically on CEQAnet (<https://ceqanet.opr.ca.gov/>) – as opposed to submitting hard copies.
- Post on Agency website – Draft, proposed, and final environmental documents – including DEIRs, EIRs, NDs, MNDs – as well as any notice of preparation (NOP), notice of determination (NOD), notice of completion, or notice of scoping meetings must be posted on the lead agency's website if it has one. Also, notices of availability (NOAs) and hearings related to the DEIR or ND are required to be posted on the lead agency's website, in addition to prior methods of giving notice.
- File and Post with County – NODs must be filed electronically with the county clerk if electronic filings are offered by the county. There is an option to post NODs either in the county clerk's office or on the county clerk's website for a period of 30 days. Additionally, NOPs and NOAs will need to be posted on the county clerk's website and physically, by hard copy, in the county clerk's office.
- Option to email NOPs – If an EIR is required, any NOP may be emailed, rather than mailed, to each entity requiring personal notice – the responsible agency, any public agency with jurisdiction over natural resources affected by the project, and OPR.
- State Agency Filings – State lead agencies are required to file NODs and NOEs electronically on CEQAnet and no longer need to submit hard copies. The filed notice must be available for public inspection on the OPR website for not less than 12 months.

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- Public Agency Notice of Completion – Public agencies must file notices of completion on CEQAnet, rather than mailing a paper copy.

PROJECT DESCRIPTION SUMMARY

The Project site is in the City of Big Pine, Inyo County, California; Latitude 37.12446 N and Longitude -118.39154 W. The Project site is located west of the intersection of Hinds Road and Glacier Lodge Road and south of Big Pine Creek. The Project proposes 5,000 square feet of outdoor cannabis cultivation within a high-tunnel greenhouse during May through October on Assessor's Parcel Numbers (APN) 018-280-27-00, 018-280-18-00, 018-280-20-00, which total 12.08 acres. The Project proposes the harvesting and drying of cannabis within a temporary canvas tent while the curing, trimming, grading, and packaging will be conducted off-site.

Timeframe: Project construction is planned to begin in May 2022 while the end date is unknown. Cannabis cultivation is expected annually thereafter during May through October and the end date is unknown.

COMMENTS AND RECOMMENDATIONS

CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (i.e., biological resources). The IS/MND has not adequately identified and disclosed the Project's impacts (i.e., direct, indirect, and cumulative) to biological resources and whether those impacts are less than significant. CDFW offers the following comments and recommendations to assist the County in adequately identifying and mitigating the Project's potentially significant impacts to biological resources. In addition to the sections below, CDFW has the following concerns:

- Incomplete description of Project activities: The IS/MND does not adequately describe the cultivation facilities or activities, so it is unclear if impacts to biological resources are less than significant, or no impact will occur. The text in the IS/MND indicates that, "The project consists of 5,000-sqft of organic cannabis cultivation to be conducted within a high-tunnel greenhouse" and provides no other details, except that the cultivation will take place annually during the months of May through October and includes harvesting and drying within a temporary canvas tent. While curing, trimming, grading, and packaging will be conducted by a different entity and offsite. Although, the IS/MND Conditional Use Permit Diagram provides development specification the figure is not high-resolution, so details cannot be read when enlarged. CDFW recommends the IS/MND include a detailed and accurate description of the cultivation and drying activities and facilities as well as the areas (i.e., APNs) to be developed for these purposes.
- Irrigation of cannabis cultivation: The IS/MND indicates that surface water will be used in irrigation for cannabis cultivation as part of an existing riparian water right,

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which gives the Applicant access to surface water. Without information on the design and scope of the irrigation method, it is not possible to determine whether impacts to biological resources are less than significant, or that no impact will occur. Nonetheless, CDFW learned through the Lake and Streambed Alteration (LSA) Program that an existing pond, possibly associated with Big Pine Creek, will provide irrigation for the Project. CDFW is concerned that extraction of water from the pond may impact fish and amphibian species potentially present within the pond and impact riparian habitat and other wildlife that depend on the pond. Thus, prior to finalizing the IS/MND, CDFW recommends the IS/MND includes a biological assessment of fish and wildlife within and surrounding the pond and describes the potential impacts to biological resources from water extraction. Additionally, if the pond is not lined, water extraction may impact groundwater levels, which the IS/MND should consider. Of concern to CDFW, is whether the pipes used in water transport associated with the pond allow for passage of fish and wildlife, the IS/MND should provide this information. Considering the significant use of water in cannabis cultivation, CDFW is concerned that potential diversion of water from Big Pine Creek into the pond may have downstream effects on Big Pine Creek and associated biological resources. In conclusion, CDFW recommends that the final IS/MND fully addresses impacts to hydrological and water resources for the life of the Project and analyzes how impacts to these resources could directly or indirectly impact local wildlife species and ecosystem function.

Assessment of Impacts to Biological Resources

Biological Report and Surveys

As part of the LSA Program, CDFW is aware that a biological assessment was performed for the Project; however, no biological assessment was provided with the IS/MND and the IS/MND only alludes to a survey performed on September 17, 2021. CDFW recommends the biological assessment be provided as an attachment to the IS/MND prior to finalization along with any other biological assessments hereby recommended.

Based on the September 17, 2021 reconnaissance survey and literature review, the IS/MND recognizes the potential for special status species to occur on the Project site, although an inventory of special status species within the Project area was not provided and the IS/MND does not identify the level of impacts on those species potentially present. Absent these details, and supporting documentation, it is unclear whether the Project's impacts (i.e., direct, indirect, and cumulative) to biological resources have been adequately identified, disclosed, and mitigated and whether those impacts are less than significant. Because CDFW is concerned that no focused field surveys were conducted, CDFW offers the comments and recommendations presented below to assist the County in adequately mitigating the Project's potentially significant impacts on biological resources and requests that the County adopt the below mitigation measures

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and in Attachment 1 (Mitigation Monitoring and Reporting Program) prior to finalizing the IS/MND.

Nesting Birds

CDFW recognizes the potential for foraging and/or breeding habitat to occur within the Project area for species of special concern (SSC): *Asio otus* (long-eared owl) and *Icteria virens* (yellow-breasted chat), and state-threatened species: *Buteo swainsoni* (Swainson's Hawk). Thus, CDFW appreciates that the IS/MND recognizes the potential presence of special status birds and the inclusion of a requirement for pre-construction nesting bird surveys. However, CDFW is concerned the requirement for pre-construction nesting bird survey has not been clearly proposed as a mitigation measure (MM) and is conditioned to only require surveys during the peak bird nesting season not considering that birds, such as hummingbirds may nest year-round. Furthermore, the IS/MND defines bird nesting season as March 1 to August 31. Please note that nesting may commence before and/or after this timeframe. For example, some species of raptors (e.g. owls, hawks, etc.) may commence nesting activities in January, and passerines may nest later than August 31. Fish and Game Code section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by Fish and Game Code or any regulation made pursuant thereto. As such, CDFW recommends that the IS/MND adopts MM BIO-1:

MM BIO-1 Pre-construction Nesting Bird Surveys:

If construction occurs during the non-nesting season (typically September 16 through December 31), a pre-construction sweep shall be performed to verify absence of nesting birds. If construction activities are scheduled to occur during the nesting season (typically January 1 through September 15), mitigation as described below shall be implemented to avoid potential impacts to birds and their nests.

If construction (including site preparation, staging, or other ground-disturbing activities) or vegetation removal is proposed during the breeding/nesting season for birds (generally, raptor nesting season is January 1 through September 15; and passerine bird nesting season is February 1 through September 1), a qualified biologist shall conduct pre-construction surveys for birds on the Project site, including a 300-foot survey buffer, no more than 3 days prior to the start of ground-disturbing activities in all suitable areas including trees, shrubs, bare ground, burrows, cavities, and structures, at the appropriate time of day/night, during appropriate weather conditions. Pre-construction surveys should focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior (e.g., copulation, carrying of food or nest materials, nest building, removal of fecal sacks, flushing suddenly from atypically close range, agitation, aggressive interactions, feigning injury or distraction displays, or other behaviors). If construction is delayed or suspended for more than 3 days after the

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survey, the area shall be resurveyed to re-confirm the presence/absence of any active nests.

If an active nest is located during pre-construction surveys, the United States Fish and Wildlife Service (USFWS) and/or the California Department of Fish and Wildlife (CDFW) (as appropriate per agency regulations) shall be notified regarding the status of the nest. Furthermore, construction activities shall be restricted as necessary to avoid disturbance of the nest until nesting activities have concluded, or the qualified biologist deems disturbance potential to be minimal. Restrictions may include, but are not limited to, establishing exclusion zones (no ingress of personnel or equipment at a minimum radius of 300 feet around an active raptor nest and 100-foot radius around an active non-raptor passerine bird nest) or altering the construction schedule.

A qualified biologist shall delineate the buffer using nest buffer signs, environmentally sensitive area fencing, pin flags, and or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.

Special-status Species

The IS/MND states, "An additional pre-construction, biological resources survey will also be required to ensure none of the species with potential habitat on the site have moved there since the September 2021 survey". CDFW appreciates that the IS/MND recognizes the potential presence for species at the start of construction. However, CDFW is concerned that the requirement for pre-construction biological resources survey has not been clearly proposed as a mitigation measure (MM) and since an inventory of species with the potential to occur on-site was not provided, it is unknown what species the pre-construction biological resources survey is meant to target. Thus, CDFW recommends the IS/MND adopts MM BIO-2 and MM BIO-3 below:

MM BIO-2 Pre-activity Surveys:

A qualified biologist shall conduct pre-activity surveys within the Project areas and a 500-foot buffer surrounding these areas 14-21 days prior to initiating Project activities. The surveys shall be conducted to identify and map for avoidance any special-status species with the potential to occur on the site and any habitat, dens, roosts, burrows, nests, etc. capable of supporting a special-status species. The qualified biologist shall ensure that the methods used to locate, identify, map, avoid, and buffer individuals or habitat are appropriate and effective, including the assurance that the surveyor has attained 100% visual coverage of the entirety of the potential impact areas, and an appropriate buffer surrounding those areas. If any special-status species (or sign of presence) is identified within or adjacent to the project area, Permittee shall immediately (within 24 hours) notify CDFW and submit, no less than one week prior to

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initiation of Project activities, species specific avoidance measures that when implemented, will fully avoid impacts to special-status species. If full avoidance cannot be accomplished, Permittee shall postpone the Project, and contact CDFW to discuss an appropriate path forward.

MM BIO-3 Pre-activity Sweeps:

A qualified biologist shall conduct pre-activity sweeps within the Project areas (including access routes) and a 500-foot buffer surrounding the Project areas, within 2 hours of initiating Project activities. The pre-activity sweeps shall confirm and mark/map for avoidance the location of any known nesting bird(s) and/or special-status species and shall verify that no addition/new nesting bird(s) and/or special-status species have occupied the Project areas or adjacent habitats. If any additional/new nesting bird(s) and/or special-status species (or sign of presence) are identified within or adjacent to the project areas during the pre-activity sweep, Permittee shall determine whether the proposed avoidance measures will be effective in fully avoiding impacts of the project on the identified resource(s) prior to initiating Project activities. If full avoidance cannot be accomplished, Permittee shall postpone the Project, and contact CDFW to discuss an appropriate path forward.

Imperiled and Rare Plants

CDFW is concerned that the September 17, 2021 surveys were not appropriate to identify rare plants, as surveys were not focused and were conducted at a time of year when plants are often hard to identify. Consequently, the IS/MND does not identify special status plants. Surveys should be timed according to the blooming period for target species and known reference populations, if available, and/or local herbaria should be visited prior to surveys to confirm the appropriate phenological state of the target species.

CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDDB and are included in *The Manual of California Vegetation* (Sawyer et al. 2009). Sensitive plants that have the potential or have been documented to occur within or adjacent to the Project area, include, but are not limited to: Father Crowley's lupine (*Lupinus padre-crowleyi*; S2) and great basin onion (*Allium atrorubens* var. *atorubens*; S2).

The IS/MND should include measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts. CDFW recommends that prior to adopting the IS/MND, the County complete focused surveys following accepted protocol/methods and updates the IS/MND to reflect the survey results and

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any changes in mitigation to address Project impacts. CDFW recommends the below mitigation measure (MM BIO-4) be added to the IS/MND to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts. If species are documented on-site during surveys and avoidance is infeasible, to adequately offset impacts, CDFW recommends the County consider purchasing credits from a mitigation bank or acquiring and conserving in perpetuity lands with the target resources.

MM BIO-4 Sensitive Plant Surveys:

Prior to Project implementation, and during the appropriate season, the County shall conduct botanical field survey following protocols set forth in the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). The surveys shall be conducted by a CDFW-approved botanist(s) experienced in conducting floristic botanical field surveys, knowledgeable of plant taxonomy and plant community ecology and classification, familiar with the plants of the area, including special status and locally significant plants, and familiar with the appropriate state and federal statutes related to plants and plant collecting. The botanical field surveys shall be conducted at the appropriate time of year when plants will both be evident and identifiable (usually, during flowering or fruiting) and, in a manner, which maximizes the likelihood of locating special status plants and sensitive natural communities that may be present. Botanical field surveys shall be conducted floristic in nature, meaning that every plant taxon that occurs in the project area is identified to the taxonomic level necessary to determine rarity and listing status.

If any rare plants or sensitive vegetation communities are identified, the County shall either avoid the occurrence, with an appropriate buffer, or mitigate the loss of the occurrence through the purchase of mitigation credits from a CDFW-approved bank or land acquisition and conservation at a minimum 3:1 (replacement-to-impact) ratio. Note that a higher ratio may be warranted if the proposed mitigation lands are located far away from the Project site (i.e., within a separate watershed) or is not occupied by or available to special status species.

If the Project has the potential to impact a State-listed species, the County should apply for a California Endangered Species Act Incidental Take Permit with the California Department of Fish and Wildlife.

Pesticides, Including Fungicides, Herbicides, Insecticides, and Rodenticides

The Project proposes the use of organic fertilizers and organic pesticides in the cultivation of cannabis. However, considering the life of the Project, CDFW is concerned with the Project's potential use of synthetic pesticides. If the applicant decides that the use of synthetic pesticides, fungicides, herbicides, and insecticides is necessary, please

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note that wildlife, including beneficial arthropods, birds, mammals, amphibians, reptiles, and fish, can be poisoned by pesticides after exposure to a toxic dose through ingestion, inhalation, or dermal contact (Fleischli et al. 2004, Pimentel 2005, Berny 2007). They can also experience secondary poisoning through feeding on animals that have been directly exposed to the pesticides. Even if used indoors, pesticides such as rodenticides may result in secondary poisoning through ingestion of sickened animals that leave the premises or ingestion of lethally poisoned animals that are disposed of outside. Even nonlethal doses of pesticides can negatively affect wildlife; pesticides can compromise immune systems, cause hormone imbalances, affect reproduction, and alter growth rates of many wildlife species (Pimentel 2005, Li and Kawada 2006, Relyea and Diecks 2008, Baldwin et al. 2009).

Considering all the above, CDFW recommends minimizing the use of synthetic pesticides and using them as directed by the manufacturer, including proper storage and disposal. Toxic pesticides should not be used where they may pass into waters of

The use of rodenticides should be restricted to avoid primary and secondary poisoning of species with the potential to occur on-site, such as Swainson's Hawk (*Buteo swainsoni*; state-threatened). Snap traps should not be used outdoors as they pose a hazard to nontarget wildlife. Sticky or glue traps should be avoided altogether as these pose a hazard to nontarget wildlife and result in a prolonged/inhumane death. In addition, the California Department of Pesticide Regulation (CDPR) stipulates that pesticides must certain criteria to be legal for use on cannabis. For details, visit: <https://www.cdpr.ca.gov/docs/cannabis/questions.htm> and <https://www.cdpr.ca.gov/docs/county/cacltrs/penfltrs/penf2015/2015atch/attach1502.pdf>

CDFW recommends that the County include a mitigation measure conditioning the Project to develop a plan to avoid, minimize, and mitigate the impacts of pesticides used in cannabis cultivation. CDFW recommends inclusion of the following mitigation measure focused on avoiding impacts to biological resources:

MM BIO-5 Pesticide Plan:

Prior to construction and issuance of any grading permit, the County of Inyo shall develop a plan with measures to avoid, minimize, or mitigate the impacts of pesticides used in cannabis cultivation, including fungicides, herbicides, insecticides, and rodenticides. The plan should include, but is not limited to, the following elements: (1) Proper use, storage, and disposal of pesticides, in accordance with manufacturers' directions and warnings; (2) Avoidance of pesticide use where toxic runoff may pass into waters of the State, including ephemeral streams; (3) Avoidance of pesticides that cannot legally be used on cannabis in the state of California, as set forth by the Department of Pesticide Regulation; (4) Avoidance of anticoagulant rodenticides and rodenticides with "flavorizers"; (5) Avoidance of sticky/glue traps; and (6) Inclusion of alternatives to toxic rodenticides, such as sanitation (removing food sources like pet food,

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cleaning up refuse, and securing garbage in sealed containers) and physical barriers.

Run-off

CDFW is concerned with the potential run-off of pollutants from Project construction and cannabis cultivation into Big Pine Creek and the pond. Thus, CDFW recommends MM BIO-6 below to prevent erosion and discharge of sediment and pollutants into Fish and Game Code section 1602 resources.

MM BIO 6: Runoff

Applicant shall actively implement Best Management Practices (BMPs) to prevent erosion and the discharge of sediment and pollutants into Big Pine Creek and the pond during Project activities. BMPs shall be monitored and repaired if necessary, to ensure maximum erosion, sediment, and pollution control.

Applicant shall prohibit the use of erosion control materials potentially harmful to fish and wildlife species, such as mono-filament netting (erosion control matting) or similar material, within and adjacent to areas subject to Fish and Game Code section 1602. All fiber rolls, straw wattles, and/or hay bales utilized within and adjacent to the Project site shall be free of nonnative plant materials. Fiber rolls or erosion control mesh shall be made of loose-weave mesh that is not fused at the intersections of the weave, such as jute, or coconut (coir) fiber, or other products without welded weaves.

Applicant shall not allow water containing mud, silt, or other pollutants from Project activities to enter Big Pine Creek or the pond or be placed in locations that may be subjected to high storm flows.

Substances which could be hazardous to fish and wildlife resources resulting from Project related activities shall be prevented from contaminating the soil and/or entering Big Pine Creek and the pond. These materials, placed within or where they may enter Big Pine Creek or the pond by the Applicant or any party working under contract or with the permission of Applicant, shall be removed immediately.

Organic or earthen material from any Project activity or associated activity of any nature shall not be allowed to enter into or be placed where it may be washed by rainfall or runoff into Big Pine Creek or the pond. No rubbish shall be deposited within 150 feet of Big Pine Creek or the pond.

Artificial Light

The IS/MND states that the Project will not use grow lights and security lights will be motion activated and that no lights will be left on continuously at night. Regardless,

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considering the life of the Project, CDFW is concerned with the Project's potential use of artificial lighting. Cannabis cultivation operations often use artificial lighting or "mixed-light" techniques in greenhouse structures and indoor operations to increase yields. If not disposed of properly, these lighting materials pose significant environmental risks because they contain mercury and other toxins (O'Hare et al. 2013). In addition to containing toxic substances, artificial lighting often results in light pollution, which has the potential to significantly and adversely affect fish and wildlife. Night lighting can disrupt the circadian rhythms of many wildlife species. Many species use photoperiod cues for communication (e.g., birdsong; Miller 2006), determining when to begin foraging (Stone et al. 2009), behavioral thermoregulation (Beiswenger 1977), and migration (Longcore and Rich 2004). Phototaxis, a phenomenon that results in attraction and movement toward light, can disorient, entrap, and temporarily blind wildlife species that experience it (Longcore and Rich 2004).

Because of the potential for artificial light to impact nocturnal wildlife species and migratory birds that fly at night, CDFW recommends MM BIO-7:

MM BIO-7 Artificial Light:

Light shall not be visible outside of any structure used for cannabis cultivation. This shall be accomplished by: employing blackout curtains where artificial light is used to prevent light escapement, eliminating all nonessential lighting from cannabis sites and avoiding or limiting the use of artificial light during the hours of dawn and dusk when many wildlife species are most active, ensuring that lighting for cultivation activities and security purposes is shielded, cast downward, and does not spill over onto other properties or upward into the night sky (see the International Dark-Sky Association standards at <http://darksky.org/>), and using LED lighting with a correlated color temperature of 3,000 Kelvins or less. All hazardous waste associated with lighting shall be disposed of properly and lighting that contains toxic compounds shall be recycled with a qualified recycler.

Noise

CDFW appreciates that the IS/MND considers the potential for noise from construction activities to disturb nesting birds. However, construction and operation of cannabis facilities may result in a substantial amount of noise through road use, equipment, and other Project-related activities that may affect various wildlife species (not just birds) in several ways as wildlife response to noise can occur at exposure levels of only 55 to 60 decibels (Barber et al. 2009). (For reference, normal conversation is approximately 60 decibels, and natural ambient noise levels [e.g., forest habitat] are generally measured at less than 50 decibels.). Anthropogenic noise can disrupt the communication of many wildlife species including frogs, birds, and bats (Sun and Narins 2005, Patricelli and Blickley 2006, Gillam and McCracken 2007, Slabbekoorn and Ripmeester 2008). Noise can also affect predator-prey relationships as many nocturnal animals such as bats and

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owls primarily use auditory cues (i.e., hearing) to hunt. Additionally, many prey species increase their vigilance behavior when exposed to noise because they need to rely more on visual detection of predators when auditory cues may be masked by noise (Rabin et al. 2006, Quinn et al. 2017). Noise has also been shown to reduce the density of nesting birds (Francis et al. 2009) and cause increased stress that results in decreased immune responses (Kight and Swaddle 2011).

Considering the above, CDFW recommends MM BIO-8 below to restrict the use of equipment to hours least likely to disrupt wildlife and to suppress device noise.

MM BIO-8 Noise:

Project construction shall not occur during the hours of dawn and dusk when many wildlife species are most active. To suppress Project noise, the Project shall implement the use of mufflers and all generators shall be enclosed.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). Information can be submitted online or via completion of the CNDDDB field survey form at the following link:

<https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the IS/MND to assist the County of Inyo in identifying and mitigating Project impacts on biological resources. CDFW concludes that the IS/MND does not adequately identify or mitigate for the Project's significant, or potentially significant, impacts on biological resources. CDFW

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recommends that the IS/MND include a more complete assessment of the Project's potential impacts on biological resources, as well as appropriate avoidance, minimization, and mitigation measures. CDFW recommends that the County adopt the recommended mitigation measures (Attachment 1) offered by CDFW prior to finalizing the IS/MND to reduce Project impacts.

CDFW appreciates the opportunity to comment on the IS/MND for Glacier Fed Farms Project and hopes our comments assist the County of Inyo identifying and mitigating Project impacts on biological resources. If you should have any questions pertaining to the comments provided in this letter, please contact Cindy Castaneda, Senior Environmental Scientist (Specialist), at (909) 544-1177 or at Cindy.Castaneda@wildlife.ca.gov.

ATTACHMENTS

Attachment 1: MMRP for CDFW-Proposed Mitigation Measures

Sincerely,

DocuSigned by:
Alisa Ellsworth

84FBB8273E4C480...
Alisa Ellsworth
Environmental Program Manager

ec: Office of Planning and Research, State Clearinghouse, Sacramento
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ATTACHMENT 1: MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

PURPOSE OF THE MMRP

The purpose of the MMRP is to ensure compliance with mitigation measures during project implementation. Mitigation measures must be implemented within the time periods indicated in the table below.

TABLE OF MITIGATION MEASURES

The following items are identified for each mitigation measure: Mitigation Measure, Implementation Schedule, and Responsible Party. The Mitigation Measure column summarizes the mitigation requirements. The Implementation Schedule column shows the date or phase when each mitigation measure will be implemented. The Responsible Party column identifies the person or agency that is primarily responsible for implementing the mitigation measure.

| Mitigation Measure | Implementation Schedule | Responsible Party |
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| <p>MM BIO-1 Pre-construction Nesting Bird Surveys:</p> <p>If construction occurs during the non-nesting season (typically September 16 through December 31), a pre-construction sweep shall be performed to verify absence of nesting birds. If construction activities are scheduled to occur during the nesting season (typically January 1 through September 15), mitigation as described below shall be implemented to avoid potential impacts to birds and their nests.</p> <p>If construction (including site preparation, staging, or other ground-disturbing activities) or vegetation removal is proposed during the breeding/nesting season for birds (generally, raptor nesting season is January 1 through September 15; and passerine bird nesting season is February 1 through September 1), a qualified biologist shall conduct pre-construction surveys for birds on the Project site, including a 300-foot survey buffer, no more than 3 days prior to the start of ground-disturbing activities in all suitable areas including trees, shrubs, bare ground, burrows, cavities, and structures, at the appropriate time of day/night, during appropriate</p> | <p>Prior to commencing ground- or vegetation-disturbing activities</p> | <p>Project Proponent</p> |

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| <p>weather conditions. Pre-construction surveys should focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior (e.g., copulation, carrying of food or nest materials, nest building, removal of fecal sacks, flushing suddenly from atypically close range, agitation, aggressive interactions, feigning injury or distraction displays, or other behaviors). If construction is delayed or suspended for more than 3 days after the survey, the area shall be resurveyed to re-confirm the presence/absence of any active nests.</p> <p>If an active nest is located during pre-construction surveys, the United States Fish and Wildlife Service (USFWS) and/or the California Department of Fish and Wildlife (CDFW) (as appropriate per agency regulations) shall be notified regarding the status of the nest. Furthermore, construction activities shall be restricted as necessary to avoid disturbance of the nest until nesting activities have concluded, or the qualified biologist deems disturbance potential to be minimal. Restrictions may include, but are not limited to, establishing exclusion zones (no ingress of personnel or equipment at a minimum radius of 300 feet around an active raptor nest and 100-foot radius around an active non-raptor passerine bird nest) or altering the construction schedule.</p> <p>A qualified biologist shall delineate the buffer using nest buffer signs, environmentally sensitive area fencing, pin flags, and or flagging tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently.</p> | | |
| <p>MM BIO-2 Pre-activity Surveys:</p> <p>A qualified biologist shall conduct pre-activity surveys within the Project areas and a 500-foot buffer surrounding these areas 14-21 days prior to initiating Project activities. The surveys shall be conducted to identify and map for avoidance</p> | <p>Prior to commencing ground- or vegetation-disturbing activities</p> | <p>Project Proponent</p> |

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| <p>any special-status species with the potential to occur on the site and any habitat, dens, roosts, burrows, nests, etc. capable of supporting a special-status species. The qualified biologist shall ensure that the methods used to locate, identify, map, avoid, and buffer individuals or habitat are appropriate and effective, including the assurance that the surveyor has attained 100% visual coverage of the entirety of the potential impact areas, and an appropriate buffer surrounding those areas. If any special-status species (or sign of presence) is identified within or adjacent to the project area, Permittee shall immediately (within 24 hours) notify CDFW and submit, no less than one week prior to initiation of Project activities, species specific avoidance measures that when implemented, will fully avoid impacts to special-status species. If full avoidance cannot be accomplished, Permittee shall postpone the Project, and contact CDFW to discuss an appropriate path forward.</p> | | |
| <p>MM BIO-3 Pre-activity Sweeps:</p> <p>A qualified biologist shall conduct pre-activity sweeps within the Project areas (including access routes) and a 500-foot buffer surrounding the Project areas, within 2 hours of initiating Project activities. The pre-activity sweeps shall confirm and mark/map for avoidance the location of any known nesting bird(s) and/or special-status species and shall verify that no addition/new nesting bird(s) and/or special-status species have occupied the Project areas or adjacent habitats. If any additional/new nesting bird(s) and/or special-status species (or sign of presence) are identified within or adjacent to the project areas during the pre-activity sweep, Permittee shall determine whether the proposed avoidance measures will be effective in fully avoiding impacts of the project on the identified resource(s) prior to initiating Project activities. If full avoidance cannot be accomplished, Permittee shall postpone the Project, and contact CDFW to discuss an appropriate path forward.</p> | <p>Prior to commencing ground- or vegetation-disturbing activities</p> | <p>Project Proponent</p> |

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| <p>MM BIO-4 Sensitive Plant Surveys:</p> <p>Prior to Project implementation, and during the appropriate season, the County shall conduct botanical field survey following protocols set forth in the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). The surveys shall be conducted by a CDFW-approved botanist(s) experienced in conducting floristic botanical field surveys, knowledgeable of plant taxonomy and plant community ecology and classification, familiar with the plants of the area, including special status and locally significant plants, and familiar with the appropriate state and federal statutes related to plants and plant collecting. The botanical field surveys shall be conducted at the appropriate time of year when plants will both be evident and identifiable (usually, during flowering or fruiting) and, in a manner, which maximizes the likelihood of locating special status plants and sensitive natural communities that may be present. Botanical field surveys shall be conducted floristic in nature, meaning that every plant taxon that occurs in the project area is identified to the taxonomic level necessary to determine rarity and listing status.</p> <p>If any rare plants or sensitive vegetation communities are identified, the County shall either avoid the occurrence, with an appropriate buffer, or mitigate the loss of the occurrence through the purchase of mitigation credits from a CDFW-approved bank or land acquisition and conservation at a minimum 3:1 (replacement-to-impact) ratio. Note that a higher ratio may be warranted if the proposed mitigation lands are located far away from the Project site (i.e., within a separate watershed) or is not occupied by or available to special status species.</p> <p>If the Project has the potential to impact a State-listed species, the County should apply for a</p> | <p>Prior to commencing ground- or vegetation-disturbing activities</p> | <p>Project Proponent</p> |
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| <p>California Endangered Species Act Incidental Take Permit with the California Department of Fish and Wildlife.</p> | | |
| <p>MM BIO-5 Pesticide Plan:</p> <p>Prior to construction and issuance of any grading permit, the County of Inyo shall develop a plan with measures to avoid, minimize, or mitigate the impacts of pesticides used in cannabis cultivation, including fungicides, herbicides, insecticides, and rodenticides. The plan should include, but is not limited to, the following elements: (1) Proper use, storage, and disposal of pesticides, in accordance with manufacturers' directions and warnings; (2) Avoidance of pesticide use where toxic runoff may pass into waters of the State, including ephemeral streams.; (3) Avoidance of pesticides that cannot legally be used on cannabis in the state of California, as set forth by the Department of Pesticide Regulation; (4) Avoidance of anticoagulant rodenticides and rodenticides with "flavorizers"; (5) Avoidance of sticky/glue traps; and (6) Inclusion of alternatives to toxic rodenticides, such as sanitation (removing food sources like pet food, cleaning up refuse, and securing garbage in sealed containers) and physical barriers.</p> | <p>Prior to commencing ground- or vegetation-disturbing activities</p> | <p>Project Proponent</p> |
| <p>MM BIO-6 Runoff:</p> <p>Applicant shall actively implement Best Management Practices (BMPs) to prevent erosion and the discharge of sediment and pollutants into Big Pine Creek and the pond during Project activities. BMPs shall be monitored and repaired if necessary, to ensure maximum erosion, sediment, and pollution control. Applicant shall prohibit the use of erosion control materials potentially harmful to fish and wildlife species, such as mono-filament netting (erosion control matting) or similar material, within and adjacent to areas subject to Fish and Game Code section 1602. All fiber rolls, straw wattles, and/or hay bales utilized within and adjacent to the Project</p> | <p>Prior to commencing and during Project activities</p> | <p>Project Proponent</p> |

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| <p>site shall be free of nonnative plant materials. Fiber rolls or erosion control mesh shall be made of loose-weave mesh that is not fused at the intersections of the weave, such as jute, or coconut (coir) fiber, or other products without welded weaves.</p> <p>Applicant shall not allow water containing mud, silt, or other pollutants from Project activities to enter Big Pine Creek or the pond or be placed in locations that may be subjected to high storm flows.</p> <p>Substances which could be hazardous to fish and wildlife resources resulting from Project related activities shall be prevented from contaminating the soil and/or entering Big Pine Creek and the pond. These materials, placed within or where they may enter Big Pine Creek or the pond by the Applicant or any party working under contract or with the permission of Applicant, shall be removed immediately.</p> <p>Organic or earthen material from any Project activity or associated activity of any nature shall not be allowed to enter into or be placed where it may be washed by rainfall or runoff into Big Pine Creek or the pond. No rubbish shall be deposited within 150 feet of Big Pine Creek or the pond.</p> | | |
| <p>MM BIO-7 Artificial Light:</p> <p>Light shall not be visible outside of any structure used for cannabis cultivation. This shall be accomplished by: employing blackout curtains where artificial light is used to prevent light escapement, eliminating all nonessential lighting from cannabis sites and avoiding or limiting the use of artificial light during the hours of dawn and dusk when many wildlife species are most active, ensuring that lighting for cultivation activities and security purposes is shielded, cast downward, and does not spill over onto other properties or upward into the night sky (see the International Dark-Sky Association standards at</p> | <p>During Project Activities</p> | <p>Project Proponent</p> |

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| <p>http://darksky.org/), and using LED lighting with a correlated color temperature of 3,000 Kelvins or less. All hazardous waste associated with lighting shall be disposed of properly and lighting that contains toxic compounds shall be recycled with a qualified recycler.</p> | | |
| <p>MM BIO-8 Noise:</p> <p>Project construction shall not occur during the hours of dawn and dusk when many wildlife species are most active. To suppress Project noise, the Project shall implement the use of mufflers and all generators shall be enclosed.</p> | <p>During Project Activities</p> | <p>Project Proponent</p> |